

THE COUNTY HALL OF RECORDS
PRESS ROOM

CORDIALLY INVITES YOU TO ATTEND
A SPECIAL SHOWING OF PHOTOGRAPHS

BY

DONOVAN E. ROBERTS

THE HERALD-EXPRESS

"THE BRIDGE BETWEEN TWO WORLDS"

TUESDAY; APRIL 28, 1959

FROM 7:00 TO 9:30 P. M.

LOS ANGELES MUSEUM

EXPOSITION PARK

JOYCE PETERSON
CITY NEWS SERVICE

JAMES EVANS LEWIS
THE EXAMINER

MAURY BEAM
THE TIMES

JAMES DENYER
THE MIRROR-NEWS

AUGUST BORIO, GERALD GILLAM
DALE VAN AMAN
THE COPLEY PRESS

HARRY BORTIN
WHITTIER NEWS

EDGAR A. WILSON
THE DAILY JOURNAL

(Regular Showing, April 28 to May 30

10 to 5 Daily)

~~Keep~~ 64 (Mus 9 color) ~~69~~

~~✓ 40~~ ~~✓ 71~~ (98) ~~✓ 88~~

~~✓ 68~~ ~~✓ 72~~ (104) ~~✓ 82~~

(3) ~~✓ 73~~ (4) ~~✓ 66~~

~~✓ 50~~ ~~✓ 77~~ ~~✓ 12~~ ~~✓ 60~~

~~✓ 17~~ ~~✓ 77~~ ~~✓ 21~~ ~~✓ 62~~

~~✓ 19~~ ~~✓ 36~~ ~~✓ 14~~ ~~✓ 57~~

~~✓ 15~~ ~~✓ 74~~ ~~✓ 24~~ ~~✓ 58~~

~~✓ 10~~ ~~✓ 75~~ ~~✓ 29~~ (7)

~~✓ 48~~ ~~✓ 54~~ ~~✓ 30~~ (5)

~~✓ 42~~ ~~✓ 25~~ ~~✓ 28~~ (8)

~~✓ 43~~ ~~✓ 53~~ ~~✓ 26~~ (2)

~~✓ 9~~ ~~✓ 70~~ ~~✓ 32~~ ~~63~~

(6) ~~✓ 41~~ ~~✓ 33~~ ~~✓ 34~~

~~✓ 67~~ ~~✓ 55~~

(1) ~~✓ 51~~

~~✓ 81~~ ~~✓ 47~~

~~✓ 83~~ ~~✓ 31~~

~~✓ 86~~ ~~✓ 84~~

99
100
Snap

Question

80 ✓

61 ✓

56 ✓

49 ✓

52 ✓

101 small

102 ✓ "

103 ✓

63 close up of octopus

9

64

9

83

6 med

Small	\$10.00
6 tw	20.00
color	30.00

4 P.M. - April 15, 1959

Donovan Roberts Pictures:

7 - 8"x10" color

2 - 11"x14" "

7 - 6"x6" Black & white

58 - 11"x14" " " "

8 - 16"x20" " " "

82 - Total, all.

Send back

2^d (duplicate, keep other)

no# (" " of 3 kept

✓45-

✓39-

✓44-

✓37-

✓18-

✓64-

✓85-

✓79-

✓16-

✓23-

✓38-

✓87-

✓78★ birds -

✓59-

✓35-

✓27-

✓46-

✓20-

✓22-

✓11-

✓74-

✓13-

104
22
82

April 28 - May 31

Donovan Roberts photographs

TO USE

9 Color enlargements -- nos. 89-97

8 Large black and white -- nos. 1-8

5 11 x 14 " " " -- nos.

9

10, 15, 17, 19, 12, 14

21, 24, 26, 28, 29, 25

30, 31, 32, 33, 34, 36

40, 41, 42, 43, 47, 48

50, 51, 53, 54, 55, 57, 58

60, 62, 65, 66, 67, 68, 69

70, 71, 72, 73, 75, 76, 77

81, 82, 83, 84, 86, 88

4 Small black and white -- nos. 98-100 and 104

POSSIBLY TO USE

6 11 x 14 black and white nos. 61, 63, 52, 56, 49, 80, ³(^{small}101-103)

TO RETURN

Large black and white duplicates of those kept; no. 2 and no number
11 x 14 black and white nos.

18, 20, 22, 27, 23

11, 13, 16

35, 37, 38, 39

44, 45, 59, 64, 46

79, 78, 74,

85, 87

IDENTIFICATION MATERIAL FOR PHOTOS.

ON LARGE MOUNTS: 8 ("x" refers to size)

1. The sandpipers are the busiest birds on the beach--dashing forward to follow the retreating wave, stopping to probe the wet sand for food, then dashing back up the beach when the wave returns. (sp?)

2. More commonplace than is generally supposed, Octopus bimaculatus hides under rocks and can change color to match his surroundings. The spots give him his name--they are not the eyes. The species does not grow to great size--the photo is about X $\frac{3}{4}$. Octopus are nocturnal in habit, but occasionally an arm will be seen extended from an under-rock lair, and the animal may be hauled out. They are quite harmless.

3. Even the relatively well protected areas of the tide pools sometimes feel the force of stormy weather. The rock, ^{right} left center, was battered by high waves, but ~~most~~ of the tube worm colony on it managed to survive, although the "house" was ~~primarily~~ one of sand.

4. The birds of the shore are like their brethren of the dry areas ⁱⁿ on one respect--they are constantly searching for food, and the low tides make hunting easier. This group contains willets, mainly, although two Hudsonian curlews are to be seen, also. (curved bills)

5. A community of life in about four feet. ^{of water} The ebb tide has left this "forest" of sponge, corraline, ^{algae} weeds, ^{sea weeds} bryozoa and sea squirts.

6. When the seas are stormy, even a firmly attached mass of kelp can be torn loose and tossed ashore. The photo shows the "hold-fast" by which ^{the plant} kelp anchors itself to rocks, etc. Within this hold-fast, a variety of animal life is usually to be found--worms, brittle stars and pea crabs. (Note: photos of brittle stars, a flat worm and pea crab might be placed below or adjacent to this. Also, there is an 11 x 14 showing the way the hold fast clamps around a rock. No. 67.) approx 1X.

Hold for Kew identity

use small X separated by space from number for X $\frac{3}{4}$ or X 1 throughout

page 2....

roberts

captions...

Large mounts...cont....

✓ 7. The common mussel--but not often spotted in ^{reaching} this size, or ^{having} with ~~some~~ many lodgers on his shell. Clinging to a rock in a slight declivity by byssus threads, *Mytilus californianus* is host to barnacles, limpets and an encrusting bryozoa (? check).

small x
1½ X

✓ 8. Only a small pool of water remains here as the tide is at ~~x~~ minus stage. The flowing grass is eel grass.. brilliantly green, and moving as though free when the surging water ~~has~~ again covered it.

---0---

2

...roberts...captions

These marked & are kept
— are to be returned
4, 15, 159

✓ 9. The green anemone (*Anthopleura xanthogrammica* 2), common, but its brilliance always attracts attention. This species grows to a diameter of 12-14 inches. A coelenterate, it traps other animals with its sticky tentacles, which close rapidly. 1X.

small x
and space
before 1

✓ 10. This ~~honey-~~ honey-comb like mass was about eight feet across. It is made up of hundreds of tubes made from sand by the annelid worm, *Phragmatopoma californica*, which extends from the tubes when the tide is in.

worms

The living

make label
X
OMIT
11. A rock face, left exposed ~~xxx~~ at low tide, is usually covered with a mass of vegetation and animal life. Here are anemones, crowded within the mass of a colonial tunicate (~~ident?~~).

The Crab,

✓ 12. *Cancer antennarius*, is a formidable arthropod—the king of the tide pools, except when he retreats to the upper levels of the shore line to burrow beneath rocks while waiting to shed one shell and to let the under layer harden. The molt is necessary to accomodate growth. Approx 1X½.

arthropod

small x - space

OMIT
13. ~~Hanging~~ from rock faces, and often found fastened to the base of kelp, is the tunicate commonly called a sea squirt. Free moving in early stages, and with the rudiments of a chord such as is found in the higher vertebrates, the sea squirt presently abandons the freedom of action to settle down and grow a tunic of cartilage like covering. Biologists debate over whether this species is not, actually, to be considered among the verterbrates. (*Stela barnharti*?) 1X.

✓ 14. The departing tide leaves an eerie scene of drooping, animal-encrusted weeds, and the shells of various animals whose one-time owners now serve as nourishment for fish, octopuses, etc.

ecerie

✓ 15. Close view of a small ~~worm~~ colony—one of several such built by the various tube worms. (ident?) 1X

of sand-tube worms.

goose-neck barnacles above,

~~X make label~~ 16: Braced against the surf--two willets, rear,
and a Marbled godwit.

✓ 17. A mass of the colonial anemone (*Bunodactis*
elegantissima?) attached to a large rock,

omit 18 }
✓ 19 } Mass of the colonial anemone at low tide.

omit 20. This is the common octopus (*Octopus bimaculatus*)
at extreme close range--about 2X. Spots from which
it gets name are below the siphon (lower center).
Eyes protruding--can move 180 degrees.

✓ 21: The edible crab ...Cancer antennarius...

~~X make label~~ 22. Small mass of tube worms...

omit 23. Tide pool

✓ 24: Kelp. Scar on stem was made by seaweed limpet,

✓ 25: Bird flight--Godwits

✓ 26: Sand and kelp

omit 27: A hanging mussel, covered by bryozoa, barnacles
and limpets. 1½ X

✓ 28: The peanut worm, trying to dig back under the sand,
where he makes his home...approx 2X

small X, space. ✓ 29: Some tide pool and lower shore line residents.
1¼ X. Live ^{clam} specimens, two of which are digging with foot.

✓ 30: Whenever a small shell begins to move rapidly, you
may be sure it is being propelled by a hermit crab. This
animal ^{takes} up residence in empty shells--or perhaps gets
rid of the original occupant himself. Hermits here are
quite small--this is ^{enlarged} approx 7-8 times ^{enlargement} the original
shell being about 1 inch long. Crab is in Basket Shells.

✓ 31. The tide is out.

✓ 32: The molt of a lobster, washed ashore by the tide and
half buried in the sand at the foot of a rock. Note ex
barnacles still on the abandoned shell....

✓ 33: Pattern on the shore. (Shell is ~~2~~ a Moon Shell, *Polinices*.)

✓ 34. Another look at a hermit crab. 10X. (see 30. & Channeled)

~~X make label~~ omit 35. Stormy day, and two surf scoters are driven in to fairly
quiet water, but will still have to dive for waves.

(4)

roberts...

Leather Sea-Star

- ✓ 36: Sea bat (*Patiria miniata*), a brilliant starfish sometimes swept inshore by rough weather.

Approx: 1½ X

- ✓ 37: A pair of Marbled Godwits on the prowl for food

- ✓ 38: In a mass of sea weeds and eel grass left as the tide receded, a Marbled Godwit

39

- ✓ 39: Wave breaking

- ✓ 40: After stormy weather--the beach is littered with kelp torn from its moorings in the inter-tidal zone.

- ✓ 41: Fishers at rest--pelicans on the beach.

- ✓ 42: Kelp forest: sand has covered the base of the kelp, which is encrusted with bryozoa ..1X

- ✓ 43: Bryozoa encrusting a tangle of kelp 1X

44)

- ✓ 45) Tide pool scene with eel grass

- ✓ 46: Hudsonian curlew

- ✓ 47: Kelp crabs, 1X. (*Pugettia producta*) Highly efficient pair of nippers on front hidden by sand. Either red or green. Not usual on shore..lives in deeper water, but sometimes driven in by storms. 1X

- ✓ 48: Worms--this type builds a calcareous tube. (Ident?)

Left, stalk of kelp with patches of the

bryozoan *Membranipora membranacea* (1X) X 1

- ✓ 49: The owl limpet, largest of the limpets. 1X

- ✓ 50: Eel grass at low tide.

- ✓ 51: Usually called a sea slug, this is a snail (mollusk) with only the rudiments of a shell. Gills are kept supplied with fresh water by the waving motion of the fan-like wings on the back. *Tethys californicus*. (sea hare)

Photo through water on beach. 1½ X

- ✓ 52: Big Rock at low tide--a choice hunting ground.

- ✓ 53: Flight of a godwit

- ✓ 54: Godwits resting

- ✓ 55: Rock laden with corallines, algae, etc.

- ✓ 56: Chitons and limpets 1X

- ✓ 57: Many small fish live in the rock pools, where they dart about too rapidly for the eye to follow. This

(x6-7) enlargement shows a tide-pool sculpin.

- ✓ 58: Not often found in the open, any more. The abalone, *Haliotis cracherodii*, Black abalone. Approx 1X natural size

omit 59)

- ✓ 60) The sand crab, or "sand bug", common to the shores. (Emerita analoga).

- ✓ 61: Our joke for the day. Melvin went fishing.

69. Large chiton (Ky-ton), a mollusk with eight interlocking plates comprising the shell. There are over 100 species on the Pacific Coast. This one is the Mossy Chiton, *Mopalia muscosa*.
Approx. x 3.

69, Karge cgutib

⑤ roberts..photo captions

✓ 62: Turning and surging in a pool, kelp is in continual motion.

✓ 63: Close view of Octopus, showing suction cups on arms. ~~(1/2X)~~ $\times \frac{1}{2}$
(See Nos. 2 and 20)

~~X make label~~ 64: Kelp

✓ 65: ~~The ~~gooseneck barnacles~~~~ gooseneck barnacles which, with the acorn barnacle, ~~is~~ ^{are} common on rocks. 3X

✓ 66: Washed ashore by rough tides, a sponge ~~(...?)~~ in a bed of eel grass... 1X

✓ 67: Holdfast of kelp... ~~Xi~~ (see no. 6) 1X

✓ 68: ~~Max~~ Rock mass is covered with a bed of mussels, in which the starfish (Pisaster ochraceous) are firmly embedded and feeding...

✓ 69 ~~68~~: Large chiton (Ky-ton), most primitive mollusk. ^{interlocking with 8 plates} ^{comprising the shell} ^{the Mossy Chiton}
Over 100 species on Pacific Coast. This one is ~~the Mossy Chiton~~
Mopalia ~~muscosa~~ ^{approx 3X} ^{Commonly called sea cradle.}

✓ 70: A gull cruising... ^(top view)

✓ 71: Brittle stars, approx 9 X. Found in kelp hold-fasts and in mossy areas covered by mussels, etc., these animals can shed limbs at will--notice the piece of one in the center of the photo. Dark green in color.

✓ 72: Underside of a brittle star ~~(20)~~ 10X

✓ 73: Common starfish, ^(Ochre star) rudely torn from its meal on a mussel, which it has opened, and grasps with tentacles. When shell is forced open, the star extrudes its stomach into the mussel shell interior and absorbs the food in this fashion. Approx ~~1X~~ ^{approximately natural size}.

OMIT 74: Star on rocks; mussels acorn barnacles.

✓ 75: ^{Ochre} the star-fish. Small shells are limpets.

✓ 76: ^{Ochre} Star. (Missing arm will regenerate.)

✓ 77: Underside of ^{bat} star (No. 36 and color). ^(See also color photo)

✓ 78: Same as No. 1 ...

~~X make label~~ 79: Low tide

✓ 80: The purple sea urchin ^(see also in color photo)

✓ 81: A marbled godwit

✓ 82: A boring clam (Pholadidea penita X) in its burrow of hard clay and rock. About ~~1X~~ ^{natural size}

✓ 83: The Hudsonian Curlew

✓ 84: ^{Top Shell} Turban snail and egg cases on the rocks...

OMIT 85) 86) Marbled godwits

6

captions....roberts

omf

87: Near sundown. Stars on rock face, low tide .

✓ 88: This tangled mass of shell-like tubes is, or was,
a colony of the fixed snail (worm shell ident?). Torn
loose from its rock mooring, it has been swept
into a tide pool and rests on the bottom.

COLOR PHOTOS

all

89: The ebbing tide leaves an algae-covered rock exposed to the air, and in the background, banks of mussels are being uncovered. The green algae furnishes a basic food supply in the food chain--many of the mollusks feed on it.

leathery sea-stars

90: A ~~sea-bat~~ (Patiria miniata) rests in a tangle of kelp at an extreme low tide. This brilliantly colored animal occurs inshore infrequently. Rough seas toss him in from deeper water. Kelp strand on left is covered with ~~an~~ encrusting bryozoa.

(worm shell mollusks)

91: Mass of the ~~fixed~~ snails (~~sp?~~), with a rock oyster lower left. While lodged in a ~~rock~~ niche ~~in~~ of rock, some of the shell structure has been destroyed, and the usual covering of sand and algae washed away by rough seas.

92: Kelp strand left behind by receding tide.

93: In rock crevices are to be found the purple sea urchin, prized as food in some regions. The spines are movable on a ball and socket joint, and the animal propels itself by moving spines through internal water pressure.

94: Most vividly colored of all the tide pool residents are the nudibranchs (naked gills). This is an eolid, species Flabellina iodinaea (~~sp?~~), found on kelp in shadowy areas. The photo, through water, shows a specimen about 4 ~~inches~~ ^{centimeters}. The bright orange processes on the back are part of the respiratory system. Classed as a mollusk, only a vestige of shell remains.

95: Wherever there is a convenient hole, this small green rock crab (~~Pachygrapsus~~ ^{sp?}) will be seen. This photo about life size, although there are somewhat larger specimens. They scurry for cover with great speed and the coloration often blends completely with surroundings.

96: Limpets, still wet from spray of the retreating sea. Life size. One of over 100 varieties. (~~sp?~~)

97: Another cluster of homes practically wrecked by the force of heavy seas. The larger tubes are from the worm (~~sp?~~), and smaller worm casts may also be seen, upper left, as well as the ubiquitous barnacle.

The large tubes are made by mollusks, while the small tubes are made by annelid worms.

roberts

SMALL PHOTOS ON 10 x 12 mounts

- ✓ 98: Godwit probing sand for a morsel--probably crab
- ✓ 99: Flat worm: an eight time enlargement of a flat, coral-colored worm that is sometimes found in the mass of ~~the~~ kelp holdfast. (With holdfast photos)
- ✓ 100: The pea crab. This specimen enlarged approx ¹⁰ times... taken from a kelp holdfast. (with holdfast photos)

✓ ~~101~~ through and incl 104: ~~101~~

Shore birds

*---0---

✓ 102
✓ 103
✓ 104

101. Shorebirds
102. Shorebirds
103. Shorebirds

104. A willet takes wing

101, 102, 103

captions....roberts

ADD COLOR PHOTOS

105: (~~to go with~~ 91 ?)

~~This is to be identified by the museum marine expert....~~

~~Possibly Tubes mollusk, Aletes squamigerus, ^{of the wormholes}~~

~~Or a serz Serpula....probably the former.~~

The tubes (calcareous) are covered with
sand and gravel. The black spots in tube centers
are the opercula--the doors which close when the
animal is out of water. Photo natural size.

Photo: same size

x 1 - ~~IX~~

x 2

